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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/508,010	05/08/2000	FREDRIK WINQUIST	BERGLUNDSP9	4135

7590 08/13/2002

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EXAMINER

HANDY, DWAYNE K

ART UNIT	PAPER NUMBER
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1743

DATE MAILED: 08/13/2002

13

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/508,010

Applicant(s)

WINQUIST ET AL.

Examiner

Jill A. Warden

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-- Th MAILING DATE of this communication appears on the cover sheet with th correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 July 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 21-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 21-38 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 21 recites the limitation of the "the transients being parts of a response between equilibrium parts of the response" This is unclear. Applicant appears to be using terms such as "parts", "a reponse" and "the reponse" interchangeably. The Examiner is unsure as to which "part" of "the" (or "a") response actually define the transients as recited in the instant claim 21.
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Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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4. Claims 21, 22, 24, 25, and 31-35 are rejected under 35 U.S.C. 102(b) as being anticipated by over Lewandowski et al. (U.S. Pat. No. 4,897,162). Lewandowski teaches a glucose sensing apparatus and methods for operating the device. The basic method involves providing voltage signals at varying levels between a reference electrode (10) and a sensing electrode (12) (column 4, also Figure 12). In addition to voltage, Lewandowski also recites using measurements of amplitude, frequency and varying wave shapes in claim 1. Varying waveshapes is also mentioned in column 5, lines 38-55. The use of superimposing (overlapping) pulses and cyclic switching, as well as a pulse frequency of 200 hertz is discussed in column , lines 3-57 and column 7, lines 16-54. Lewandowski specifically recites applying voltage to electrodes and recording current in column 4, lines 8-30.

Inventorship

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

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Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 23, 26-30 and 36-38 are rejected 35 U.S.C. 103(a) as being unpatentable over Lewandowski et al. (U.S. Pat. No. 4,897,162) in view of Lewis et al. (5, 571,401).

Lewandowski, as described above in paragraph 8, teaches every element of claims 23, 26-30 and 36-38 except for the two dimensional response pattern , a plurality of different electrodes arranged in a manner to influence the sensor result. Lewis teaches a sensor array which detects

fluids based on resistance measurements from electrodes. The measurements are represented in two dimensional form (Figure 3) and even three dimensional form in certain embodiments.

Lewis also teaches that these electrodes work together in an array to provide the measurements (col. 2). Lewis describes measuring temporal response and data manipulation in col. 7, lines 39-

57. It would have been obvious to one of ordinary skill in the art to add the teachings of Lewis to the method/device of Lewandowski. The arrangement of the electrodes and subsequent response pattern produced by Lewis allows for a more distinct measurement of an analyte.

Lewis provides a neural network system which would control interrogation of the sensor as described by Lewandowski. This would be advantageous when measuring a sample.

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Response to Arguments

8. Applicant's arguments filed 5/10/02 have been fully considered but they are not persuasive. Applicant appears to be relying on several arguments in traversing the previous rejections made by the Examiner involving the reference Lewandowski. The first argument is that Lewandowski does not reflect the instant method since the reference does not reflect the ability to change measuring parameters without exchanging the sensor array of sensors. The Examiner submits that this feature is not sufficiently reflected in the claims. Applicant has claimed a method in which electrical pulses of a first electrical entity are applied to electrodes and a response of a second entity is measured by examining transient parts. As stated earlier, Lewandowski recites applying voltage to electrodes and recording current in column 4, lines 8-30. Next, applicant has argued that since Lewandowski et al. take their readings at a generally uniform voltage level, transients are not recorded. While it may be true that the voltage levels are uniform (applicant cited this passage), the Examiner submits that the reading of the current measurements as described later in column 5, lines 55-68 would meet this requirement. Lewandowski appears to take a reading after the voltage pulse. The voltage pulse provides a sudden change in voltage that is then measured. This sudden change would be a transient response. As such, the claims remain rejected.

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Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dwayne K. Handy whose telephone number is (703)-305-0211. The examiner can normally be reached on Monday-Friday from 7:30 to 4:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden, can be reached on (703)-308-4037. The fax phone number for the organization where this application or proceeding is assigned is (703)-772-9310.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-308-0661.


Jill Warden
Supervisory Patent Examiner
Technology Center 1700

dkh

July 15, 2002